

OCT 03 2005

PTO/SB/21 (09-04)

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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

34

Application Number

10/516,505

Filing Date

12-01-2004

First Named Inventor

C. Frank Bennett

Art Unit

Examiner Name

Attorney Docket Number

PTS-0055 USA

ENCLOSURES (Check all that apply)

| | | |
|---|---|---|
| <input type="checkbox"/> Fee Transmittal Form | <input type="checkbox"/> Drawing(s) | <input type="checkbox"/> After Allowance Communication to TC |
| <input type="checkbox"/> Fee Attached | <input type="checkbox"/> Licensing-related Papers | <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences |
| <input type="checkbox"/> Amendment/Reply | <input type="checkbox"/> Petition | <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) |
| <input type="checkbox"/> After Final | <input type="checkbox"/> Petition to Convert to a Provisional Application | <input type="checkbox"/> Proprietary Information |
| <input type="checkbox"/> Affidavits/declaration(s) | <input checked="" type="checkbox"/> Power of Attorney, Revocation | <input type="checkbox"/> Status Letter |
| <input type="checkbox"/> Extension of Time Request | <input type="checkbox"/> Change of Correspondence Address | <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): |
| <input type="checkbox"/> Express Abandonment Request | <input type="checkbox"/> Terminal Disclaimer | |
| <input type="checkbox"/> Information Disclosure Statement | <input type="checkbox"/> Request for Refund | |
| <input type="checkbox"/> Certified Copy of Priority Document(s) | <input type="checkbox"/> CD, Number of CD(s) _____ | |
| <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application | <input type="checkbox"/> Landscape Table on CD | |
| <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53 | | |
| <input type="checkbox"/> Remarks Statement under 3.73(b) table | | |

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

| | | | |
|--------------|----------------------------|----------|--------|
| Firm Name | Isis Pharmaceuticals, Inc. | | |
| Signature | | | |
| Printed name | Donna T. Ward, Ph.D. | | |
| Date | 9/30/05 | Reg. No. | 48,271 |

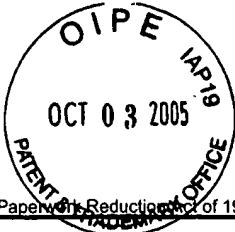
CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

| | | | |
|-----------------------|---------------|------|-----------|
| Signature | | | |
| Typed or printed name | Pamela Grooms | Date | 9-30-2005 |

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PTO/SB/82 (09-04)

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**REVOCATION OF POWER OF
ATTORNEY WITH
NEW POWER OF ATTORNEY
AND
CHANGE OF CORRESPONDENCE ADDRESS**

| | |
|------------------------|--------------------|
| Application Number | See Attached Table |
| Filing Date | See Attached Table |
| First Named Inventor | See Attached Table |
| Art Unit | |
| Examiner Name | |
| Attorney Docket Number | See Attached Table |

I hereby revoke all previous powers of attorney given in the above-identified application.

A Power of Attorney is submitted herewith.

OR

I hereby appoint the practitioners associated with the Customer Number: 34,138

Please change the correspondence address for the above-identified application to:

The address associated with
Customer Number: 34,138

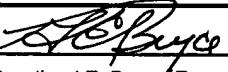
OR

| | | | |
|---|-------|-----|--|
| <input type="checkbox"/> Firm or Individual Name | | | |
| Address | | | |
| City | State | Zip | |
| Country | | | |
| Telephone | Fax | | |

I am the:

Applicant/Inventor.
 Assignee of record of the entire interest. See 37 CFR 3.71.
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

SIGNATURE of Applicant or Assignee of Record

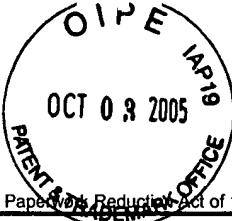
| | | | |
|-----------|---|-----------|--------------|
| Signature |  | | |
| Name | Grantland E. Bryce, Esq. | | |
| Date | 09/29/2005 | Telephone | 760 931-9200 |

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

*Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.36. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PTO/SB/96 (09-04)

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STATEMENT UNDER 37 CFR 3.73(b)Applicant/Patent Owner: Isis Pharmaceuticals, Inc.Application No./Patent No.: See Attached Table Filed/Issue Date: See Attached TableEntitled: See Attached Table

Isis Pharmaceuticals, Inc., a Corporation
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. the assignee of the entire right, title, and interest; or
2. an assignee of less than the entire right, title and interest.
The extent (by percentage) of its ownership interest is _____ %

in the patent application/patent identified above by virtue of either:

A. An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel See Attached Table, Frame See Attached Table, or for which a copy thereof is attached.

OR

B. A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

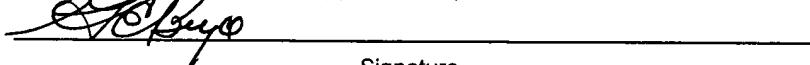
1. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.
2. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.
3. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

Additional documents in the chain of title are listed on a supplemental sheet.

Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

09/29/2005

Signature

Date

Grantland E. Bryce, Esq.760 931-9200

Printed or Typed Name

Telephone Number

Vice President and General Counsel

Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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| Table A | | Title | | Reel | Frame | Inventor | Docket Number | New Customer Number |
|---------------|-------------|--|-------|------|---------------------|-----------------|---------------|---------------------|
| Serial Number | Filing Date | | | | | | | |
| 60/620,792 | 10/20/2004 | AEROSOL DELIVERY OF VLA-4 SPECIFIC ANTISENSE OLIGONUCLEOTIDES INHIBIT AIRWAY INFLAMMATION AND HYPERRESPONSIVENESS IN MICE | 15825 | 819 | Bennett, C. Frank | BIOI0049US.L | 27,180 | |
| 60/648,820 | 01/31/2005 | AEROSOL DELIVERY OF VLA-4 SPECIFIC ANTISENSE OLIGONUCLEOTIDES INHIBIT AIRWAY INFLAMMATION AND HYPERRESPONSIVENESS IN MICE COMPOSITIONS AND THEIR USES DIRECTED TO INTEGRIN ALPHA 5 | 15987 | 402 | Bennett, C. Frank | BIOI0049US.L2 | 27,180 | |
| 60/667,581 | 04/01/2005 | ANTISENSE MODULATION OF HORMONE-SENSITIVE LIPOASE EXPRESSION | 16248 | 879 | Bennett, C. Frank | BIOI0054US.L | 27,180 | |
| 09/915,814 | 07/26/2001 | ANTISENSE MODULATION OF CONNECTIVE TISSUE GROWTH FACTOR EXPRESSION | 12429 | 605 | Butler, Madeline M. | ISPH-0587 | 34,138 | |
| 10/006,191 | 12/10/2001 | ANTISENSE MODULATION OF RANK EXPRESSION | 13694 | 583 | Gaarde, William A. | RTS-0274 | 34,138 | |
| 10/111,868 | 08/06/2002 | ANTISENSE MODULATION OF RANK EXPRESSION | 13797 | 278 | Baker, Brenda F. | RTSP-0313 | 34,138 | |
| 10/111,868 | 08/06/2002 | ANTISENSE MODULATION OF RANK EXPRESSION | 14401 | 109 | Baker, Brenda F. | RTSP-0313 | 34,138 | |
| 10/159,856 | 05/31/2002 | ANTISENSE MODULATION OF G PROTEIN-COUPLED RECEPTOR KINASE 6 EXPRESSION | 12974 | 419 | Freier, Susan M. | RTS-0365 | 34,138 | |
| 10/274,085 | 10/17/2002 | ANTISENSE MODULATION OF FATTY ACID SYNTHASE EXPRESSION | 13795 | 879 | Freier, Susan M. | ISPH-0714 | 34,138 | |
| 10/516,505 | 12/01/2004 | ANTISENSE MODULATION OF EXTRACELLULAR-SIGNAL-REGULATED KINASE-6 EXPRESSION | 16444 | 934 | Bennett, C. Frank | PTS-0055USA | 34,138 | |
| | | A SECONDARY STRUCTURE DEFINING DATABASE AND METHODS FOR DETERMINING IDENTITY AND GEOGRAPHIC ORIGIN OF AN UNKNOWN BIOAGENT THEREBY | | | | | | |
| 10/754,415 | 01/09/2004 | A METHOD FOR SELECTING AN ACTIVE OLIGONUCLEOTIDE PREDICTIVE MODEL | 15473 | 192 | Ecker, David J. | DIBIS-0003US.P2 | 34,138 | |
| 10/880,427 | 06/28/2004 | MODULATION OF RANKL EXPRESSION | 15262 | 234 | Sipes, Tamara Balac | CORE0002US | 34,138 | |
| 10/944,274 | 09/17/2004 | | 15820 | 665 | Baker, Brenda F. | RTS-0618US | 34,138 | |